May/June 2001 $2.50

MONTANA OUTDOORS

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1901 2001
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Montana Outdoors (ISSN 0027-0016), the official publication of Montana Fish, Wildlife & Parks, is published bimonthly (January, March, May, July, September, and November). Contributions (manuscripts or illustrations) are welcome with the understanding that the department or the editor cannot be responsible for loss or damage. All contributions will be published at the discretion of the editor. Subscription rates are $9 for one year, $16 for two years, and $22 for three years. (Please add $3 per year for Canadian subscriptions. All other foreign subscriptions, airmail only, are $25 for one year.) Individual copies and back issues cost $3.50 each (includes postage). Although *Montana Outdoors* is copyright ©, permission to reprint articles is available by writing our office or phoning us at 406-444-2474. All correspondence should be addressed: *Montana Outdoors*, Montana Fish, Wildlife & Parks, 930 West Custer Ave., P.O. Box 200701, Helena, MT 59620-0701 or e-mail at montanaoutdoors@state.mt.us. Web site address is fwp.state.mt.us. ©Montana Fish, Wildlife & Parks, 2001. All rights reserved.

Postmaster: Send address changes to *Montana Outdoors*, Montana Fish, Wildlife & Parks, 930 West Custer Ave., P.O. Box 200701, Helena, MT 59620-0701. Preferred periodicals postage paid at Helena, MT 59620, and additional mailing offices.

Our Point of View

What are your most cherished outdoor experiences?

I've been fortunate. I've enjoyed so many wonderful experiences it's difficult to single out just one. I remember spending early mornings fishing the Two Medicine River with my dad, great hunting adventures on farms and ranches in eastern Montana, and I especially remember the cold autumn days when my children bagged their first mule deer bucks.

Are these all to be simply memories of the good old days? Can young men and women have similar adventures today or has the social and biological landscape changed that forever?

Answers to these questions are likely to vary widely depending on where we hail from, how we were brought up, and our personal interests.

I was born, raised, and educated in Montana, and I choose to live and work here largely because of my love for this great state and the outdoor recreational opportunities it has to offer. I believe others have made many of the same decisions I have, and for very similar reasons. Forty-five percent of our citizens call themselves hunters. No other state has a higher percentage of people who hunt. I also know of many Montanans who have moved away for more lucrative employment, but they return as often as possible to recreate. Thousands of other nonresidents admire Montana's resources—and the work it has taken to conserve them—and they travel great distances to return time and again to build on their own cherished outdoor experiences.

In my first month as director of Montana Fish, Wildlife & Parks, I was exposed to two issues—fishing on two of Montana's premier blue ribbon trout streams and the burgeoning interest in upland game bird hunting in Montana—that show how fundamental outdoor activities are to the Montana way of life. Each issue addressed the new social pressures on outdoor recreation. The solutions focused on redistributing users to avoid conflicts and create better fishing and hunting experiences. The department and the FWP Commission worked diligently to craft regulations that considered everyone's comments and interests and attempted to answer the question that helps many of us define our lives in Montana: "What are your most cherished outdoor experiences?"

Together we must continue to encourage citizen involvement in these processes to guarantee reasonable results. FWP is responsible for the stewardship of Montana's fish, wildlife, and park resources. The beneficiaries of this stewardship are the resources themselves and the citizens and visitors who enjoy them.

I look forward to working with all of you to enhance these resources and provide recreational opportunities and cherished memories for everyone who cares enough to lend a hand.

M. Jeff Hagener

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Director, Montana Fish, Wildlife & Parks

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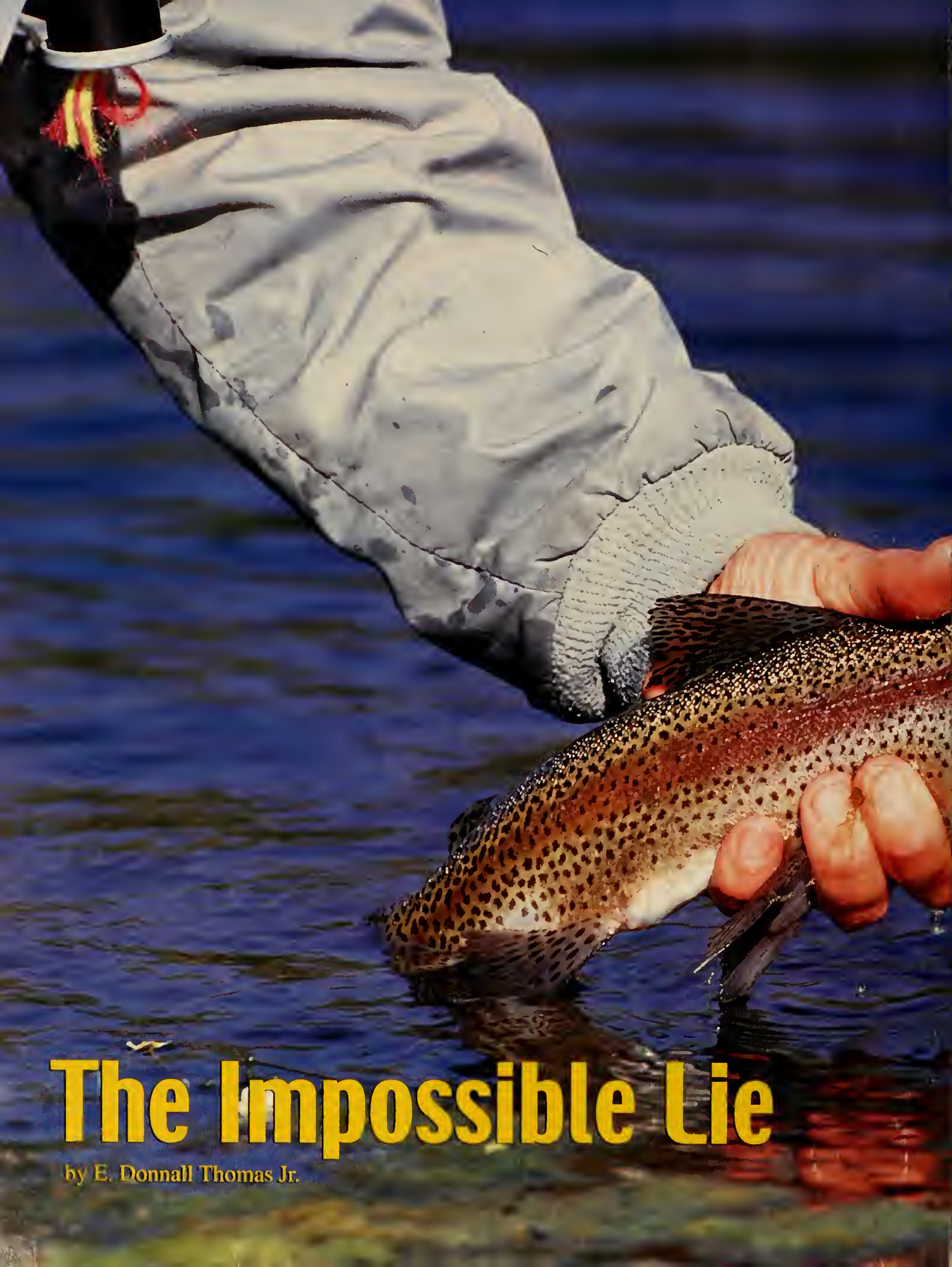


The Impossible Lie

by E. Donnall Thomas Jr.

Editor's note.—The following story is excerpted from E. Donnall Thomas Jr.'s book To All Things a Season, *which chronicles a year's events in the outdoors. Autographed copies of the book are available for $30 plus $2 shipping and handling by writing him at 224 W. Main St., #206, Lewistown, MT 59457 or by calling 406-538-7436. This book and others may also be ordered at his web site, www.bowsite.com/thomas/*

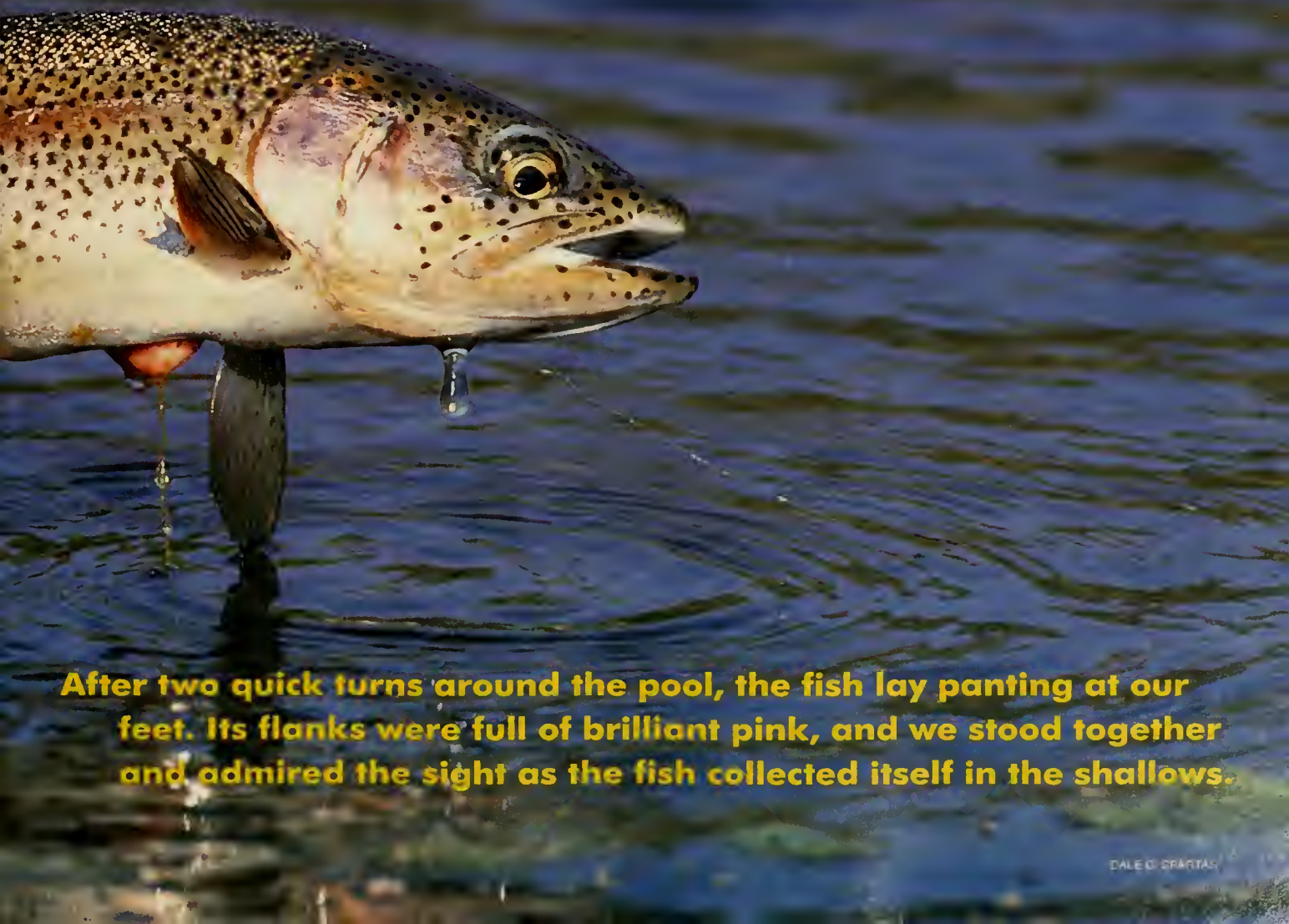
There is no source of conflict as reliable as politics and no cure for conflict as reliable as a trout stream. Doctors generally make lousy politicians. They are also said in certain quarters to make lousy pilots, writers, and fishermen, and while I've spent considerable time and effort trying to refute by example those last three allegations, I'll concede the part about the politics without any argument whatsoever. Our training prepares us poorly for making deals and building consensus, for our world is one of decisive choices: operate or observe, 50 milligrams or 100, alive or dead. After all, one does not negotiate with death, at least not on this side of a Bergman movie.

True to form, I am a lousy politician. The cost of my failures in the political arena is usually easy enough to bear, since I've never cared much about money, power, or prestige. But, I still belong to a generation that has trouble standing by and watching the bad guys win, and so, against my better judgment, I keep rolling out of hibernation from time to time like an old grizzly, setting off to fight Quixotic battles no one else wants to fight. In contrast to the grizzlies, I usually get my butt kicked for my trouble.

So there I was one June evening, coming off a long losing streak with people in suits, demonized by the opposition, defeated in corporate war, and feeling my age in a way that had nothing at all to do with my recent birthday. "Do I need this?" I asked Lori in one of my occasional fits of self-pity.

"Of course not," she replied. "It's all b.s. Let's go fishing."

Her idea sounded absolutely brilliant. We threw our gear into the truck and drove down to the creek. Thunderstorms and late runoff had kept the water high and dirty all month, but the creek's higher reaches looked fishable, so we stopped at a neighbor's ranch and walked down to take a look. There weren't any hatches in progress, so I tied on a bead-head hare's ear and handed the rod to Lori and coached her upstream through the first riffle. She still lacked confi-



After two quick turns around the pool, the fish lay panting at our feet. Its flanks were full of brilliant pink, and we stood together and admired the sight as the fish collected itself in the shallows.

DALE C. SPARTAS

DALE C. SPARTAS

dence in her nymphing skills, which meant that when she wasn't catching fish, she assumed that it was because she was doing something wrong. In fact, she was casting and reading the water well. The difference in our approach to the creek had nothing to do with ability. It was just that I believed in the nymph on the end of the line and she didn't, and there was no way to reconcile this discrepancy except to encourage her along until the trout woke up and she started to catch some fish.

The air was hot and heavy, and lush summer vegetation covered the banks. High water had subtly altered the configuration of the creek like a sculptor reworking a clay figure, and I saw that I would have to learn its intricacies all over again. The current was running six inches higher than it should have been in June, all of which imparted a taste of unfamiliarity to water I had known well for twenty years.

Lori worked the first long riffle and the pool above it without a strike. At the head of the pool, I studied the water next to the opposite bank and saw a fish feeding in a complex eddy behind a downed log. I tried to point the fish out to Lori but she couldn't see it, and when I tried to describe the necessary cast to her, she simply handed me the rod. A gentleman would have refused it, but hey, it was time to reach out and touch someone.

I flicked the hare's ear into the eddy, mended the line sharply upstream, and watched the rainbow materialize and inhale the fly. The sight of the fish was so sudden that I nearly struck too soon, but the hook wound up delicately implanted in the trout's upper lip. After two quick turns around the pool, the fish lay panting at our feet. Its flanks were full of brilliant pink, and we stood together and admired the sight as the fish collected itself in the shallows. Then I bent down and backed the hook from its snout as easily as undoing a button, and the fish was free again.

By this time, more trout were feeding in the same eddy. I handed the rod back to Lori and watched her wade out and address the water. Her level of belief

had risen a notch or two after the first fish, but I could still sense her skepticism. Suddenly, the line hesitated and she struck, and then she was fast to a fish of her own. Lori whooped when the fish jumped and I could practically see a new vision take charge of her. A nymph fisherman was being born right in front of me.

She lost that fish, hooked another one, and lost that one, too. The magic of conjuring trout from the creek had hopelessly compromised her ability to manage hot rainbows on light line. She was fishing like an excited kid, and I told her so without implying criticism. Excitement is the idea after all, and watching her lose fish was the best thing that had happened to me all week.

She hooked and lost several more rainbows in short order, by which time the eddy had taken all the disturbance it meant to take. The water fell quiet, and we walked on upstream to look for more feeding fish. Lori hooked two more rainbows casting blindly into the next pool, but then the creek lost interest in what we had to offer. We kicked around half-heartedly for another twenty minutes, but the frenzy of activity had spoiled us and we didn't feel like working for fish we couldn't see. We climbed up out of the stream and through the brush to the edge of an alfalfa field and followed its margin slowly back toward the truck. There was nothing more that we needed there; the creek had already given us all we could ask for and perhaps a little more than we deserved.

Trying to reproduce small, perfect moments in the outdoors is almost always a mistake, whether the quarry is rising trout, bugling elk, or inbound flocks of mallards. There are too many variables, and while nature has a profound regard for order in the face of chaos, its method may not always be apparent, at least to fools like us. Nonetheless, I returned to the same stretch of water the following day in search of whatever had coaxed those big 'bows up into their feeding stations. It wasn't so much that I needed to catch fish. I just wanted to see them working the current again after the long, weary months of high water.

Lori was busy with something, so I had to rely on Sonny for company. The sun still rode well above the hills to the west, but the light had acquired the rich, warm tones of evening. Angered by my proximity to their hidden nest, a pair of redwings scolded overhead as I walked past a flooded oxbow. It finally felt like summer on the high plains, and then I remembered the date. The solstice was at hand; the season of lengthening nights was about to begin again.

DONALD M. JONES

Angered by my proximity to their hidden nest, a pair of redwings scolded overhead....

Like everything else in central Montana, the creek was behind schedule this spring. Mayflies should have been pouring off the water, but the current looked cool and sterile. I nymphed my way through fifty yards of water without making contact with a fish. Lori's eddy was empty, as if a witch had cast a spell upon it. I slid the fly into the hook-keeper and set off upstream with the sun at my back, searching rather than fishing—alert, like a frustrated suitor, to any sign of interest the creek might show me.

Sonny, as usual, was trying hard to convince himself that we were hunting something, and I had to stay after him constantly to keep him by my side. A high bank eventually forced me across the creek. The water was so high that I damn near went over my boots in the process, a mishap all but unheard of this late in the year. A lone caddis fly skittered across the surface, and I stopped to see if this might be the beginning of something, but it wasn't. As soon as we reached the other side of the creek, Sonny jumped up on the bank next to me and shook, anointing me in the process. It occurred to me that I should be angry, but I just wasn't in the mood for it, confirming the value of being outside with good company rather than inside with people you can't stand.

I followed the creek upstream toward a timbered ridge that cast long gentle shadows down out of the trees. At the head of a deep pool, something caught my eye and I stopped to study the water. A fish was feeding against the opposite bank. Even in the failing light, I could see that it was a rainbow, and a big one; bigger, at least, than all the fish that had failed to make an appearance during my long, unproductive walk upstream.

I quickly waded into the current and worked a loop of line into the air, but my first good look at the fish's lie made me stop and reconsider. The rainbow was feeding right behind a downed snag that made any sort of presentation from upstream impossible. One of the snag's branches lay parallel to the current between me and the fish, effectively boxing it in. To complete the dilemma, overhanging limbs covered the whole pocket like a cloak. Although scarcely fifteen feet from the tip of my rod, the trout might as well have been on another planet.

As I watched, the fish wove its way in and out of the obstructions like a dancer.

It was feeding well beneath the surface at first, but it came higher and higher each time it made a pass until it was slurping insects right out of the surface film. Indeed, a small, unfamiliar mayfly was suddenly coming off the water between my boots. I studied the current and the maze of obstacles again and finally decided that a perfectly executed roll cast might just do the trick.

At the head of a deep pool, something cought my eye and I stopped to study the water. A fish was feeding against the opposite bank.

DALE C. SPARTAS

After tying a tiny emerger fast to the end of the tippet, I slid a cast in under the branches. It was a good effort, earning a near miss from the fish before the current overrode my mend and swept the fly into the nearest branch. Hooked up solidly to the obstruction, I faced a difficult decision. Wade out and salvage the fly or snap the tippet gently and try again? Aw hell; if the first cast was a good idea, a second one was, too. What are fly tying benches for, anyway?

I was more cautious the next time, keeping the fly well away from the branches, and, perforce, well away from the fish, which ignored each presentation completely. Perhaps I subliminally hoped to spook the lie and end the frustration, but I couldn't even manage to do that. Finally, I forced the line up into the shrouded pocket and caught another branch. Enough was enough; I waded grimly out into the water and reached across the pulsing current with my rod to extract the fly like a stubborn wisdom tooth.

Nothing doing. The water was too swift and deep to get where I needed to go, so I whipped petulantly at the snagged hook with the end of the rod. Leaves fell on the trout's head, but the fish ignored the commotion. When the tippet finally snapped, the fish was up on the surface with its maw open wide, tacking back and forth while the current swept emergers into its gullet. And this was a world-wise spring creek rainbow, the kind of trout you're supposed to stalk on hands and knees. The fish seemed to know it was impregnable back in its little fortress of brush, and it was hard not to read a certain measure of insolence into its refusal to retreat from its feeding position. Fish, of course, don't *know* anything, nor do they experience emotions beyond the primitive nervous system's periodic imperatives to fight or flight. How then to explain this one's behavior? Had the fish learned by experience that feeding in this exact location spared it the occasional sting of the hook? Had the fish been there its whole adult life and never known the hook at all? In either case, the rainbow seemed secure in its marvelously safe harbor, while I was left to press my nose against the windowpane and gaze inward, perhaps with more than a little bit of envy.

I donated two more flies to the trout's reliable perimeter defenses before calling it quits. My emerger patterns are simple affairs of pheasant quill, and given the ease of tying them and the pleasure of collecting the material for their construction, the loss of the flies to the tenacious brush didn't really bother me. Even so, the encounter reminded me of wasting arrows shooting at blue grouse in pine trees: no matter how tempting the idea of one more shot may be, there comes a time when you just have to limit your losses and quit.

The trout was still feeding eagerly when I turned my back and walked away, yet there were no regrets. Had I caught it, the fish would already be forgotten, like its more gullible cousins earlier in the week and a thousand others over the course of seasons past. Instead, the trout in the impossible lie had become something memorable and therefore prized, reminding me in the process that there is indeed a best of all possible worlds waiting for each of us. All we have to do is walk out the door and enter it. ■

Reaching Consensus

by John Fraley and Rich Janssen

Sometimes, a good result is worth a long wait.

Several years ago, Montana's governor and the Confederated Salish and Kootenai tribal chairman called on the citizens and agencies in northwestern Montana to bridge differences and develop a joint plan for managing the controversial fisheries issues regarding 28-mile-long Flathead Lake and the upper river system. At the time, many people said it couldn't be done. But in typical Montana fashion, citizens rose to the occasion.

PAT GAILE THOMAS

With the introduction of *Mysis* shrimp to Flathead Lake in the 1980s, lake trout increased at the expense of native species like bull trout and westslope cutthroat trout. Current management strategy for improving native trout populations calls for reducing lake trout numbers through increased angling harvest of smaller fish while maintaining the fishery for larger lake trout (right).

PAUL F. UPDIKE

The Flathead Lake and River Co-Management Plan is unique in Montana, and perhaps in the western United States. The plan represents the coming together of two governments and two cultures in a common direction for a shared fishery.

Flathead Lake represents a biological and cultural enigma in which change is the only constant. Native and nonnative fish coexist in the lake and river environment, often clashing in one way or another through predation or competition. Adding to this uncertainty, the West's largest natural lake straddles two nations and cultures; the south half of the lake lies within the Flathead Indian Reservation, which is home to the Confederated Salish and Kootenai Tribes. Unlike the conflicts noted in the aquatic environment, relations between the state and tribes regarding fish and wildlife have been a model of cooperation.

To manage Flathead Lake, Montana and the tribes chose more than a decade ago to start down a path leading to co-management rather than litigation. In November of 1990, after years of negotiations, the two parties struck an agreement to jointly manage fish and wildlife resources within the reservation boundary. The agreement, renewed in 1994 and again in 1998, established the Flathead Reservation Fish and Wildlife Board, a unique body made up of state, tribal, and federal representatives. The board has been a model of cooperation and helped steer the present co-management plan to a positive conclusion.

The Confederated Salish and Kootenai Tribal Council approved the plan with only one of 10 council members voting against it. "The overwhelming support of the council shows that the tribes are happy with the direction of the plan because it will strive to enhance native fish," says Tribal Chairman Fred Matt. "This emphasis on native fish supports their role in our culture and religious practices." A key step in the plan will be to research the possibility of releasing culturally important white sturgeon in Flathead Lake, he adds.

Matt emphasizes that the system is uniquely important to the people of the Confederated Salish and Kootenai Tribes, made up of Salish, Pend O'reille, Kalispel, and Kootenai Indians. Tribal members view the system in their own way, but a deep reverence is common to all. Members of both the Salish and Kootenai cultural committees stress that humans are just caretakers of the system who rely on native fish and wildlife for their cultural integrity, spirituality, and survival. This set of values is why the native species propagation in Flathead Lake is so important to the tribes.

The tribes maintain that white sturgeon were a part of this important native species mix," says Brian Lipscomb, division manager of Fish, Wildlife, Recreation and Conservation for the tribes. "With stories about the white sturgeon passed on through generations and songs written and sung about sturgeon, you cannot deny the sturgeon are in the lake or had been previously," he adds. "We look forward to working with the state and the U.S. Fish and Wildlife Service on researching the possibility of reintroducing this very important fish species to Flathead Lake."

Patrick Graham, FWP director during the process, praises the co-management plan and the cooperation with the tribes. "This plan is sustainable because it is biologically possible, affordable, and has broad public support," he says. "The challenge is to increase native trout while maintaining recreational fishing opportunity for other species."

Managing Flathead Lake's fisheries has never been easy. Flathead's 100,000-acre pool has been a cauldron of uncertainty for decades. Dams and other human works have chipped away at the habitat in the river system. Nonnative fish introductions begun before 1900 pose problems for native westslope cutthroat trout and bull trout. When the opossum shrimp *(Mysis relicta)* came on the scene in the 1980s, it became clear the aquatic system was permanently changed. Kokanee salmon came and went but the *Mysis* shrimp came and stayed, benefiting nonnative lake trout and lake whitefish, which now provide most of the recreational fishery.

With the establishment of *Mysis*, survival and abundance of lake trout increased greatly to the detriment of native bull trout and westslope cutthroat trout. Managers increased angling limits on lake trout and decreased limits on bull trout and westslope cutthroat trout to balance the lake and river system. These angling-limit changes illustrate the strategy followed by FWP and the tribes to address increasing numbers of nonnative fish and decreasing numbers of native fish. The new co-management plan builds on and extends this strategy and couples it with actions to improve lake access, water quality, habitat, and public education.

The plan relies on recreational fishing to reduce nonnative fish numbers. If this strategy is not successful, more aggressive strategies such as commercial fishing or agency netting may be used to reduce nonnative fish.

The lake's complex food web requires a new, flexible management approach based on "adaptive management," which emphasizes using new knowledge and techniques as they become available. Using this approach, the plan outlines an aggressive monitoring program and then calls for new management steps if necessary to address changes. At the same time, managers have to be careful not to destabilize the system by making changes too large or too fast.

The citizens assembled to bring the co-management plan together—formally known as the Flathead Lake and River Fisheries Co-Management Advisory Committee—began their job with caution. The diversity of opinions on the committee, reflecting the sentiment of the larger public, led some to say that there would never be a convergence. But those detractors turned out to be wrong.

The advisory committee was able to reach agreement on a number of actions

to improve the lake and river fisheries. Also, the committee developed four options or approaches to deal with the complexity of fisheries management in Flathead Lake and River. In spite of the diverse backgrounds and opposing opinions, 11 of the 12 members voted to release the four options as suitable for comment. Through a series of extensive public comment periods organized through the Flathead Reservation Fish and Wildlife Board, these options were modified, combined, and shaped into the adopted management strategy.

Committee member Cindy Foster is positive about the results: "I felt it was a good process and I appreciated having a chance to vote on the people who were placed on the committee. I felt like I had a voice in the process from the beginning." Including peer-selected citizens from varied backgrounds, including tribal members, was a major advantage, says Foster.

Tribal member and advisory committee member Tom Branson agrees, but takes a wait-and-see approach. "I think the process went really well, especially with Virginia Tribe as the facilitator," he says. "I believe any plan is better than no plan. Only time will tell if it is going in the right direction. No doubt it will have to be adjusted as time goes on to meet all objectives."

Arlen Roll, a committee member with 50 years of experience fishing Flathead Lake and River has mixed feelings about the plan's outcome. "I think the plan did not deal well enough with the fundamental issue of water quality," Roll says. "Some of the committee's recommendations dropped by the wayside. I would like to have seen a coordinated sewage collection site around the lake and restrictions on burning at certain times of year to reduce nutrient input to the lake. Also, I'm concerned about encouraging people to catch large numbers of lake trout and delivering them to collection facilities. I think this lowers the value of the angler and is inconsistent with the tradition of sport fishing." Roll also believes that more work needs to be done beyond this plan regarding nonnative pike in the river. These concerns aside, Roll commends the plan: "It represents a well-balanced approach to meeting the objectives set before us: benefiting native species while maintaining a recreational fishery. I believe the conservative strategy is working and we should continue in that direction."

Like Foster and Branson, Roll has praise for the process that led to the final plan. "Having the public involved, particularly a wide variety of the public, is an excellent approach to decision-making on a public resource. In the final analysis, considering the varied opinions, it was an excellent effort. I hope that as we move forward we can build

RON BOGGS

The Flathead Lake and River Co-Management Plan includes closer monitoring of fish populations, identifying secure levels of native bull trout and westslope cutthroat trout (below), and research into the feasibility of releasing white sturgeon (right) into Flathead Lake.

DENVERBRYAN.COM

JOHN FRALEY

The Flathead Lake and River Fisheries Co-Management Advisory Committee: back row, left to right—Darrel Clairmont, Arlen Roll, Tom Branson; middle row, left to right—Phil Catalfomo, Ron Mohn, Patrick Lefthand Jr., Tom McDonald; front row, left to right—facilitator Virginia Tribe, Jim Landwehr, Cindy Foster, Patty Stevens, George Hover, Dan Paschke.

on positive coalitions to put the plan into action."

Committee member Dan Paschke supports the cooperative process that led to acceptance of the co-management plan, but believes a specific number of bull trout nests or other criteria should have been identified that would trigger more aggressive steps to reduce nonnative lake trout. The committee and agencies struggled with this issue, but realized it would take additional scientific investigation to identify "secure" levels for bull trout and westslope cutthroat trout. From these discussions emerged the strategy and promise by the state and tribes to collect the necessary data during the first year of the plan.

Ron Mohn, owner of Mountain Lake Fisheries, brought a unique perspective to the advisory committee. Mohn makes his living catching and marketing lake whitefish in the Flathead River and Flathead Lake. "If we want to increase the harvest of nonnative lake whitefish, the only real way to do it is through commercial fishing," he says. "Lake whitefish are difficult to clean, so I believe anglers would welcome the opportunity to turn their fish into a commercial processor rather than clean the fish themselves."

Mohn did years of research on catching and marketing whitefish before beginning his business in 1993. His company's volume of processed whole fish increased from about 10,000 pounds during the first years to 20,000 pounds in recent years. Most of the whitefish harvest comes from a hook-and-line fishery in the upper Flathead River. Anglers catch few lake whitefish in Flathead Lake, so the only way to significantly increase harvest in Flathead Lake is through trapping, he believes.

Mohn also believes regulation changes called for in the plan should be put on a fast track. "We can't wait a year or two to increase the whitefish limit to 100 fish," he says. Mohn notes that the citizen committee approach was a good one, and believes the public should remain in close contact as the co-management plan goes forward.

Agreeing with the need for public involvement, committee member George Hover urges managers to listen to anglers who regularly fish the lake and river system. He has high praise for creel workers who contact and interview anglers, and suggests that FWP and tribal biologists spend time talking to anglers and looking at their catches to "ground-truth" their findings. Hover says he is "optimistically enthusiastic" that the plan will be a success, as long as the agencies stay true to the plan's goals and take great care in collecting and analyzing fisheries data.

The co-management plan garnered public and agency support because it was built with the help of citizens. And for the plan to be successful, citizens must help implement the plan with regard to habitat, fish management, water quality, and education.

Already, citizens have stepped forward. The Flathead Lakers, a civic group with more than 1,000 members, has offered to help build partnerships for improving water quality. The Lakers and other citizens and businesses around the lake will also help organize a "Flathead Lake Honoring" event as called for in the co-management plan. Anglers and food banks will be instrumental in holding numbers of nonnative lake trout in check while contributing to community well-being.

Even though Flathead Lake's fishery continues to be in a state of flux, many are optimistic that the co-management plan has finally struck a good balance. Committee member Cindy Foster summed up the result of the consensus reached among the state, tribes, and citizens. "I think the tribes and the state are going to be monitoring native species very closely and will adjust the plan accordingly," she says. "That's the way it is designed and the way it should work. I like the tribal vision of restoring native species but we also have to work with the people on the lake such as anglers, business operators, and the public who are interested in what happens. It will take some time, but I believe the right choices have been made for the lake and the fisheries in it." ■

JOHN FRALEY

Bull trout nests or "redds" are visible as large, teardrop-shaped clearings in streambed gravel.

Management Goals and Objectives

Within the 10-year period of this management plan, the state and tribes will accomplish the following goals:

- Increase and protect native trout populations (bull trout and westslope cutthroat trout).
- Balance tradeoffs between native species conservation and nonnative species reduction to maintain a viable recreational/subsistence fishery.
- Protect the high-quality water and habitat characteristics of Flathead Lake and its watershed.

Under the overall fisheries management goals, four major objectives will be achieved:

- Determine the population size and characteristics for westslope cutthroat trout and bull trout that are required for population security, using a science-based approach, by December 2001. This population level will be defined using a combination of information, including spawner counts, juvenile abundance, net and angler catch, and consultation with fisheries managers and researchers in other areas.
- Increase and protect native trout populations to at least secure levels. This objective will be measured using the information derived under the above objective. In the interim, implement a graduated series of fish population management strategies, and other strategies, aimed at increasing native fish numbers.
- Maintain or if needed increase harvest of nonnative fish to benefit native fish species. This objective will be measured by monitoring harvest rates of nonnative fish. The 1998 estimated harvest of lake trout was roughly 40,000 fish. This level of harvest may be controlling lake trout and benefiting native fish. If lake trout harvest is too high (as measured by a declining recreational fishery), fishing regulations will be adjusted to improve the fishery as long as the action does not conflict with native trout goals.
- Provide a recreational fishery based on nonnative and native fish with harvest opportunities based primarily on nonnative fish. Maintenance of current levels of angler use should be possible through maintaining opportunity to catch larger lake trout and other fish species to make up for losses in the fishery for small lake trout.

A joint state/tribal technical team will be responsible for implementing the plan. Fisheries managers Jim Vashro of FWP and Les Evarts of the tribes will oversee management of the lake and river fisheries, while biologists Barry Hansen of the tribes and Mark Deleray of FWP will be in charge of monitoring and studying fish populations. Annual progress reports will be made to the Flathead Reservation Fish and Wildlife Board at regularly scheduled public meetings. A detailed report and need for mid-course adjustments will be made at the end of the first five years.

Montana's Flying Toads

by Ellen Horowitz

"Flying toads," said the Cajun. "I didn't know you had flying toads in Montana."

I shifted my gaze from a narrow-winged creature fluttering through June's twilight sky to my friend and back to the sky. The creature's rapid, batlike wingbeat ended in an aerial plunge. A hollow whirring noise—a deep "ooom"—followed on the upswing, and then more fluttering.

DONALD M. JONES

"Bullbats," said the Cajun. "The bullbats are out."

"You mean those mosquito hawks, those goatsuckers?" I asked.

We continued watching the distinctive silhouettes circle high in the sky, flutter, and dive. We listened to their loud single-note cries and booming sounds. The nighthawks were back. For me, they represent the sound of summer more than any other bird.

Nighthawks are the last of the migrants to arrive in Montana. These common, but not well-known birds are found throughout the state. Flying above forests, plains, meadows, and even cities, they are the easiest birds of our summer skies to identify—either by sight or sound. The first nighthawks show up in early June, with the majority appearing around the middle of the month. Nighthawks nest as far north as the Yukon and Labrador and winter as far south as Argentina. Their migration is the longest of any North American land bird.

The colorful names associated with this robin-size bird reflect a lot of fiction and some of the facts surrounding it. The common nighthawk, *Chordeiles minor,* is the most widely distributed member of the goatsucker family in North America. "Goatsucker" is the translation of the scientific name, Caprimulgidae. In ancient times, people mistakenly believed that birds of this family suckled milk from goats. These wide-mouthed birds, however, only fed on insects stirred up by the goats. Nighthawks, like all members of the goatsucker family, are voracious insect eaters.

Characteristics shared by goatsuckers include enormous bug-catching mouths; tiny bills; large, flat heads; big eyes; small, weak feet; and white patches on wings. Except for the nighthawk all are named for their calls, which are loud, jarring, and late at night. Nightjar is another name for this family of birds. The only other nightjar or goatsucker found in Montana is the common poorwill. The whip-poor-will and chuck-will's-widow are well known in other parts of the country.

Despite their name, nighthawks are neither hawks nor birds of the night. Most nighthawk activity occurs at dusk—about the time the bats come out to feed....During inactive periods, nighthawks roost on the ground or perch lengthwise on tree limbs.

Despite their name, nighthawks are neither hawks nor birds of the night. Most nighthawk activity occurs at dusk—about the time the bats come out to feed. I've also listened to them and watched their aerial performances on overcast afternoons. During inactive periods, nighthawks roost on the ground or perch lengthwise on tree limbs.

In flight, the nighthawk has a falcon-like silhouette—slim body and long, pointed wings with a crook at the joints. Distinctive white patches on the underside of the wings and erratic wingbeats make this bird easy to recognize. The male nighthawk is distinguished from the female by a white throat patch and tail band. The female has a buff-colored throat.

The male spends much of his active time conspicuously displaying, calling, and circling above his territory. Anyone who enjoys being outside on warm June and July evenings has undoubtedly heard the nighthawk's loud nasal call. An equally unique sound made with wings readily identifies him aloft. To make this sound the flying male swoops down, often within feet of his mate, and abruptly pulls upward. Air rushing between the primary feathers vibrates them and creates a sound generally referred to as "booming."

DONALD M. JONES

Female nighthawks lay their two eggs directly on the ground, trusting the speckled pattern to provide camouflage.

Sounds are often difficult to describe. In 1828, Alexander Wilson explained the unusual nighthawk noise as a "loud booming sound very much resembling that produced by blowing strongly into the bunghole of an empty hogshead." Other nineteenth century ornithologists referred to the wing noise as sounding like "the whirring of a spinning wheel" or "the sound produced by a bellowing bull." During my first summer teaching field classes 25 years ago, I recalled an evening walk with an octogenarian naturalist who paused as male nighthawks dive-bombed through the sky.

"Pork and beans, pork and beans," said my mentor.

JAN L. WASSINK

TOM J. ULRICH

Huh? What did pork and beans have to do with nighthawks? He repeated the words and then I stifled my laugh. The name alluded to the sound of the nighthawk's display, a sound resembling the "breaking of wind" following a meal of—what else—pork and beans. "Pork and beans" is an old-time name for the nighthawk. But this music represents only part of the male's flamboyance.

The metaphorical French name "crapaud volans," or flying toad, used by my Cajun friend explains another aspect of nighthawk courtship and sound. Following his aerial antics the male nighthawk lands near a perspective mate. He fans his tail and rocks his body. With bill held tightly closed he puffs up his throat to reveal a large, white, toadlike patch of skin. Prince Charming synchronizes his throat inflation with resonant, croaking sounds. Eventually he woos a female and mating takes place.

Eggs are laid directly on the ground in dry, open forests, grasslands, or on gravelly ridges. Females also nest on gravel roofs in cities. Nesting in the open seems risky, but cryptic coloration—mottled and wavy patterns of brown, black, white, and buff—along with nearly closed eyes and motionless stance—disguise the female as part of the earth. A nighthawk discovered by Thoreau while on a walk "...did not look like an actual living creature, far less a winged creature

Above: A female nighthawk and her young blend perfectly with pine needles and twigs littering the forest floor. **Left:** The poorwill, a close cousin of the nighthawk, is less common in Montana and seldom seen.

JAN L. WASSINK

A female nighthawk feigns injury to draw an intruder away from her nest.

of the air, but a figure in stone or bronze, a fanciful production of art."

Only the female incubates the two eggs, which hatch after 19 days. Speckled with gray, lilac, brown, and olive, the cream-colored eggs look like the rocks and pebbles surrounding them. If an intruder appears, the female flies a short distance and performs a distraction display. Feigning injury, she drags a wing and leads the assailant away. She eventually flies away from her would-be attacker and returns to her nest. During incubation, the male continues his booming descents. When his offspring hatch he assists with feeding the gape-mouthed babies.

Nighthawks gather all their groceries in the air—anywhere from a few feet to about 150 feet above the ground. Sometimes called mosquito hawks, these opportunistic feeders have been documented with 50 different species of insects in their stomachs. Beetles, grasshoppers, caddisflies, and moths represent part of their diet. One nighthawk was found with 2,175 flying ants in its stomach. Nighthawks do not sail through the bug-filled skies with cavernous mouths held wide open. Their bills snap open and closed with each chitinous morsel.

While nighthawks are beneficial because of the quantities and types of insects they eat, they have not always fared well by humans. The stigma of having "hawk" attached to their name has, at times, proved lethal. In the late 1800s, the Pennsylvania Game Commission endorsed a bounty on all nighthawks because they were known as "hawks." Some people foolishly believed these tiny-billed, weak-footed creatures were chicken killers.

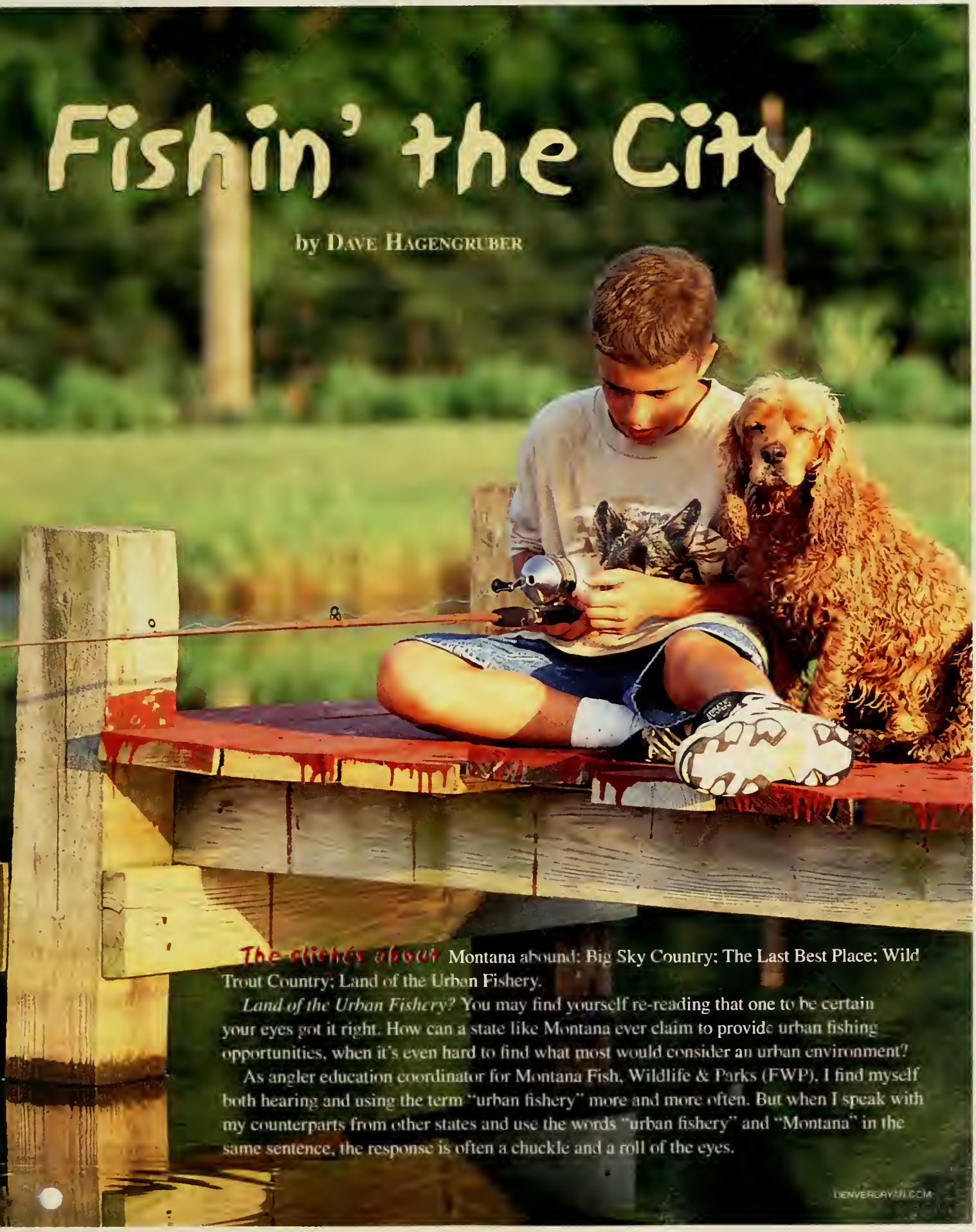
In many southern states nighthawks were once considered game birds. The meat was said to be delicious and the bullbat's swift and erratic flight made it a challenging target. Nighthawk shooting or "bat hunting" was outlawed in 1902.

Over the past 25 years, nighthawk populations have declined noticeably in parts of the United States. No one knows why. In Montana negative trends have not been reported, but nighthawks aren't well monitored.

Nighthawks begin their southward journey in August. Although their stay in Montana is brief, I always look forward to their homecoming. Next June I'll listen for the loud single-note calls and booming sounds that announce summer. I'll watch for the return of Montana's flying toads. ■

Fishin' the City

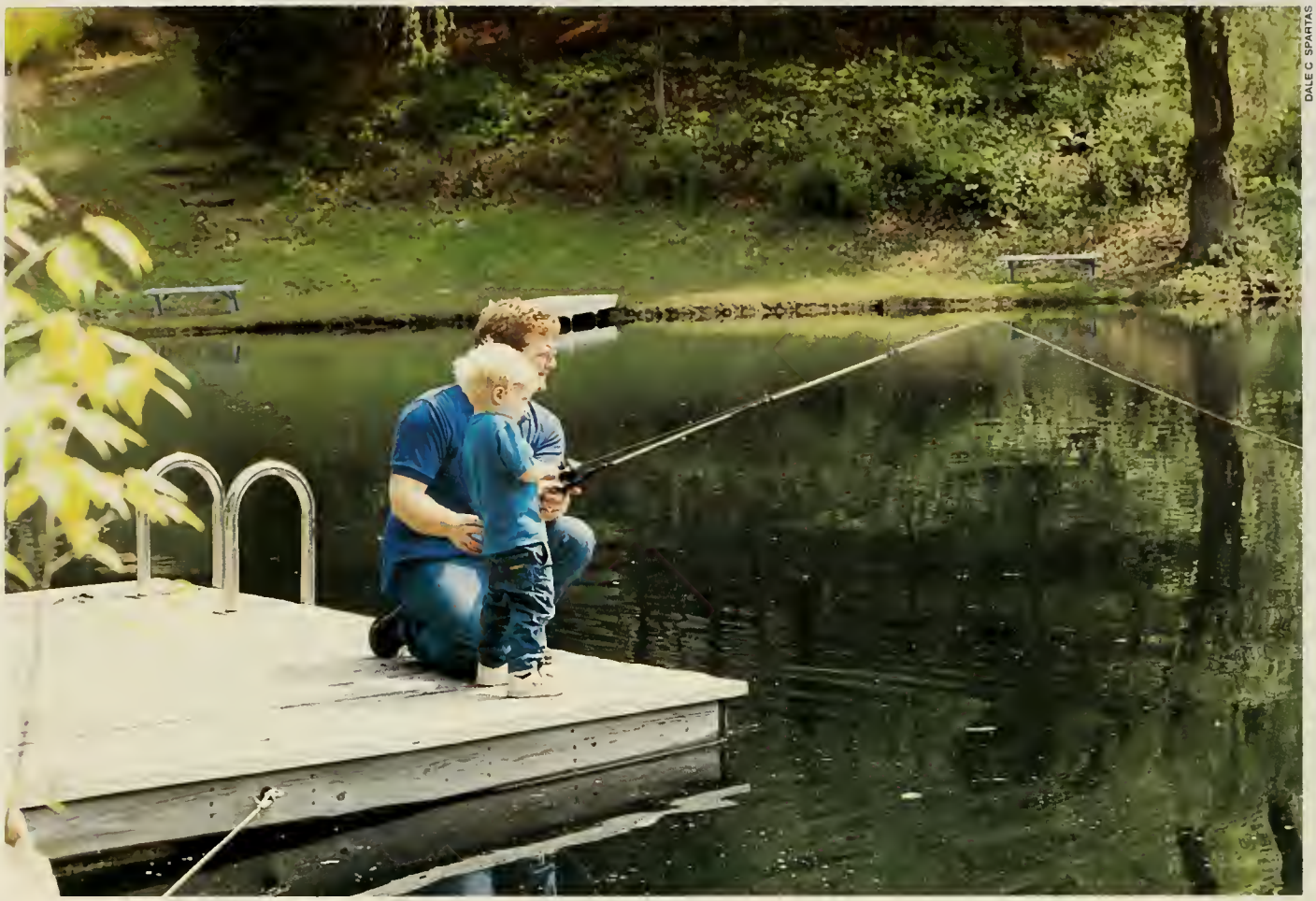
by Dave Hagengruber



The cliches about Montana abound: Big Sky Country; The Last Best Place; Wild Trout Country; Land of the Urban Fishery.

Land of the Urban Fishery? You may find yourself re-reading that one to be certain your eyes got it right. How can a state like Montana ever claim to provide urban fishing opportunities, when it's even hard to find what most would consider an urban environment?

As angler education coordinator for Montana Fish, Wildlife & Parks (FWP), I find myself both hearing and using the term "urban fishery" more and more often. But when I speak with my counterparts from other states and use the words "urban fishery" and "Montana" in the same sentence, the response is often a chuckle and a roll of the eyes.



As one component of FWP's "Family Fishing Adventures Program," urban fisheries are intended to give young anglers the kind of positive early experiences that lead to lifelong enjoyment of the sport.

I have to admit that when I let my mind wander to a scene I think of as an urban fishery, a certain stereotype emerges: a hot, humid day; a stagnant lagoon in an inner city park, filled with greenish-brown water and algae; kids casting oversized red and white bobbers from concrete sidewalks, trying to catch yellow perch and stunted bluegills. Not a typical scene for Montana.

But what exactly is an urban fishery, and does such a thing exist here? From the perspective of Montana Fish, Wildlife & Parks, urban fisheries are simply waters suitable for family fishing that are reasonably near populated areas. Some of these fisheries may rely on hatchery fish to sustain or augment them, while others depend on naturally reproducing populations. In most cases, biologists are more concerned with maintaining a high catch rate than in utilizing a particular species of fish. Rainbow trout are most commonly stocked in these waters, but cutthroat trout, yellow perch, sunfish, bass, catfish, and bullheads are all found in urban fisheries across the state.

Although some of the ponds are designated "kids' fishing only," in most cases they are not managed or regulated just for kids. The focus is on developing sites where entire families can enjoy time fishing together. The thought that came into the mind of Pat Graham, FWP director during much of the 1990s, was that of children riding their bicycles, fishing rods in hand, out to a local pond where they could spend summer afternoons fishing and ultimately develop an interest and appreciation for the entire aquatic ecosystem. Graham emphasized urban fisheries as one component of FWP's "Family Fishing Adventures Program," believing that children with positive early experiences on the water would have a much greater likelihood of eventually developing into lifelong anglers.

While FWP's long-range plans call for continued development and management of urban fisheries, many of the details have yet to be worked out. "It's difficult to get a handle on the exact definition of an urban fishery," says Karen Zackheim, management bureau chief in the Fisheries Division, who is heading a task force charged with developing guidelines for the state's urban fisheries. "How far can a fishery be located from a city or town and still be considered an urban fishery? Should we try to manage the fishery just for the highest catch rate, or are there other factors we need to consider? We're discovering there are a lot of questions that need to be answered as this program starts to expand."

Not surprisingly, in a state with

worldwide recognition for its wilderness and wild trout management, the overall concept of urban fisheries has not always been popular with biologists and fish managers. Jim Vashro, fisheries manager for FWP's Region 1 in northwestern Montana, admits his own opinion has changed over the past decade. "Certainly these fisheries are a very artificial system, and my initial reluctance to getting involved was because of that fact," he says. "But after seeing the response of the families fishing these ponds, and the fun they were having together, my attitude changed 180 degrees. I've talked with so many people at these ponds who said without them they wouldn't be fishing. We need to provide this opportunity if we want to get new anglers into fishing."

Region 1 currently has four urban fishing locations, and will have five additional sites within the next year, says Vashro. In many cases, the ponds see extremely heavy use. Dry Bridge Slough, a one-acre pond in Kalispell, logged more than 2,000 angler-days in its first year.

Few would contest the fact that urban fisheries are popular with many Montanans, but a major question surrounding these fishing opportunities centers on the use of hatcheries, and the concern that these sites teach anglers that good fishing depends on a visit from the hatchery truck. "Montana has always been a leader in managing for wild fish, and it's important that people do not automatically equate better fishing with more fish stocking," explains Zackheim. "Many of these sites get heavy use by schools involved in our angler education programs, and the instructors and teachers are careful to discuss hatcheries as just one tool that fish managers have at their disposal. We try to emphasize the importance of good habitat, well-thought-out regulations, and catch-and-release as additional tools that can all help improve the fishing."

Because many of the urban sites rely on hatcheries to augment fish numbers, the strain on the state's fish hatchery

DAVE HAGENGRUBER

Adjacent to the Missouri River near Townsend, the kids' fishing pond is stocked several times a year with cutthroat trout from the Washoe Park Hatchery.

Indian Road Pond

Indian Road Pond just outside of Townsend is one of Montana's newest urban fisheries. The pond began life as a shallow, carp-filled borrow pit created by a bridge construction project on the Missouri River. Local interest in improving both the site and the fishery led to creation of the Broadwater County Stream and Lake Committee, which began fundraising in 1992. By 1999 the committee had raised over $20,000, and both FWP and the federal Bureau of Reclamation had joined the project.

Construction began in March of 1999, and in just over a month the shallow pit had been converted to a shining example of a fishing pond. To provide fish with cool water in summer and allow them to survive the winter, the pond was deepened to more than 14 feet. A wheelchair-accessible path was constructed around the perimeter of the pond, and a small bridge was built over a narrow channel. Flat boulders were strategically placed along shore, providing anglers with a perfect location to enjoy the shade of towering cottonwoods and pass the day watching a bobber float along.

Ron Spoon is the FWP fisheries biologist who worked on the project. "This is really a pond that the local community built," he says. "They raised the funds and spearheaded the effort to get this done, and their kids are the ones I see riding their bikes out there to fish."

Spoon says the entire site has seen a tremendous expansion of use. Ice skaters use it in the winter, and hikers walk out from town to spend time there. The pond is stocked several times a year with seven- to nine-inch westslope cutthroats from the Washoe Park Hatchery in Anaconda. "We have steady use out there, but fortunately it never seems to be overcrowded," says Spoon. Indian Road Pond is designated as a kids' pond, and pending legislation this year, will be open to fishing only by children ages 14 and under.

DENNIS J. LINGOHR

Ponds in eastern Montana are often stocked with bass or channel catfish from FWP's warmwater hatchery in Miles City.

system is also a very real issue. "The demand for catchable-size fish for urban fisheries is increasing each year," says Gary Bertellotti, chief of FWP's Hatchery Bureau. He notes that raising a trout to a catchable size of six to eight inches takes longer, requires more hatchery rearing space, and uses more food than growing a fish to the normal two- to three-inch size for stocking in lakes and reservoirs. "The urban fisheries are wonderful," he says, "but from a hatchery standpoint, raising these larger fish takes up a lot of space that could be used to grow many more smaller fish for other waters."

FWP's eight coldwater hatcheries currently produce about five million trout per year; last year roughly 250,000 of these, mostly Arlee-strain rainbows, went to urban fisheries. About 150,000 bass and channel catfish raised at FWP's warmwater hatchery in Miles City were used to stock urban ponds, primarily those near Miles City and Glasgow. "One of the most positive aspects from a hatchery manager's perspective," says Bertellotti, "is that we see a very high return on the fish that we do stock. We put them in, people take them out. Those fish are definitely being utilized."

Jim Vashro, too, worries about the strain placed on the hatchery system. But he feels that changing the production goals to meet some of the new objectives will pay long-term dividends. "The hatcheries do have a limited capacity to produce fish," agrees Vashro, "but for most folks, these urban ponds are a way to get started and develop an interest in fishing. After they develop their proficiency, I think they'll begin branching out to new horizons. I think that in the long run we're doing the right thing."

Not all of Montana's urban fisheries rely on hatcheries to sustain them. In Miles City, a yellow perch fishery in Cook Lake is popular with the city's young anglers. The two-acre lake is shallow and relies on overflow from the city swimming oasis to provide water each spring. By early fall, the city stops pumping water for the swimming pond, and the lake dries up.

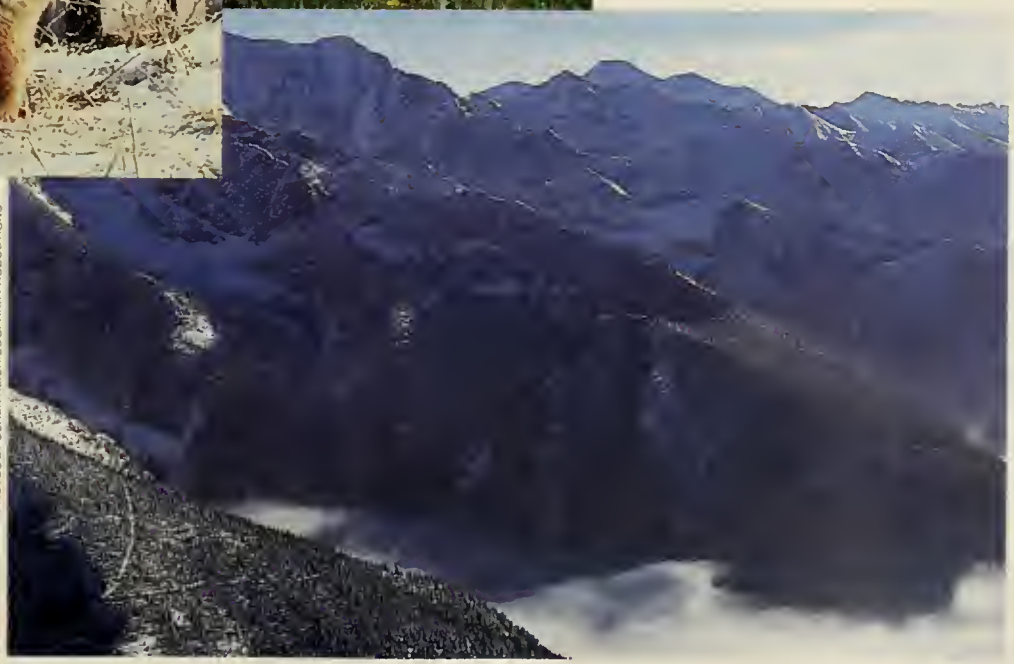
To provide the fishery, FWP personnel and local Walleyes Unlimited volunteers move yellow perch each spring from other waters around Miles City into Cook Lake. "It takes a lot of effort to collect and transport those perch," says Brad Schmitz, regional fisheries manager in Miles City, who along with his crew spends three to four days each year moving the fish. "But I remember when I was a kid how I would ride my bike miles across my hometown to fish a little pond like this. The pond gives the kids in Miles City an opportunity to fish and a great place to be introduced to fishing. You can go by the lake any day in the summer and see a couple of kids out there fishing."

As Pat Graham envisioned, Montana's urban fisheries play an important role in the recruitment of new anglers and provide families with a place to spend time together in the outdoors. Although there are questions to be answered and problems to be overcome, it is clear they are a valuable resource. While the rest of the world may not consider Kalispell, Miles City, or Townsend to be especially "urban," the fisheries located near these communities face many of the same challenges and offer the same rewards as those in cities like Chicago or Minneapolis. And if you look closely, you'll see that the smile on the face of a kid catching a fish is about same size no matter where he or she may live. ■

To give wildlife a boost, the Montana Fish, Wildlife & Parks Foundation is:

Swinging for the Fences

PHOTOS BY DEREK REICH/ZOOPRAX PRODUCTIONS



by KEITH HIGHLEY

Early in his eight-year tenure as director of Montana Fish, Wildlife & Parks (FWP), Pat Graham, who retired at the end of 2000, began to see significant demographic and social changes in Montana. The state's population was increasing markedly, especially in the Bitterroot and Flathead valleys of western Montana. Subdivisions and urban sprawl were bringing people and wildlife into conflict, and FWP suddenly had new problems and challenges with only limited resources available to meet them.

Traditional funding sources—sportsman's license dollars and federal excise taxes on hunting and fishing equipment—often are not adequate to cope with these expanded responsibilities, says Graham. "To a large degree the general public doesn't understand that their tax dollars are not being spent on the state's wildlife. But given the opportunity, we felt people who like Montana and want it to stay this way would offer their support." A funding vehicle was needed that would allow a broader range of people to contribute.

After studying examples from other states, Graham concluded that a public nonprofit foundation would offer the best solution. As a result, in 1999 the Montana Fish, Wildlife and Parks Foundation was born. Its mission: "To provide private support for critical efforts of Montana Fish, Wildlife & Parks and to take a leadership role in preserving and enhancing Montana's natural, cultural, and recreational resources for

A bear cub rescued from last summer's wildfires focused the FWP Foundation's attention on raising funds for a new wildlife rehabilitation and education center to replace FWP's outmoded wild animal shelter. A joint project of the Mikal Kellner Foundation for Animals, FWP, and the U.S. Forest Service, the new facility (see artist's rendering above) will be constructed at Spring Meadow Lake State Park in Helena.

TOM BAUER/THE MISSOULIAN

future generations."

Graham hired former FWP Commission chairman and Beaverhead County commissioner Spence Hegstad to serve as liaison between the department and the new foundation's board. The pair then recruited an all-star slate of successful business people with a passion for what Hegstad calls "the magic that is Montana" to serve on the board. Newly elected chairman Earl Sherron and board members Margaret Moddison, Gary Carlson, John Brown, and Lee Poole all share one thing: a passion for the state's wildlife and scenic places and frustration with seeing important wildlife and park programs going unfulfilled because of chronic funding shortages.

One of Hegstad's first official duties was to request project proposals from within the department. He received 42 responses with accompanying budgets totaling over $40 million. Hegstad, Graham, and FWP Chief of Operations Rich Clough whittled the list down and submitted 14 proposals to the foundation board for consideration.

As its flagship project, the board chose a proposal submitted by FWP grizzly bear management specialist Tim Manley: the Wind River Bear Institute's "Partners in Life" program. Founded by veteran bear biologist Carrie Hunt, the internationally renowned program involves the use of Karelian bear dogs and other aversive conditioning tools to correct problem bear behavior by teaching the animals to understand and respect human boundaries.

Since its inception in 1995, Partners in Life has posted an impressive track record. In Yosemite National Park, a team of dogs and handlers has reduced black bear damage in busy campgrounds to the lowest level in 40 years. Wildlife officials in Alberta have also incorporated Karelian bear dogs and aversive conditioning techniques into their bear management strategy.

But it is in Montana, working with Tim Manley in the western portion of the Northern Continental Divide Ecosystem since 1996, that Hunt has made her greatest contributions to bear conservation. Manley notes that in 1998—a poor berry year that saw bears entering communities in search of food—the Partners in Life program helped save 14 grizzly bears that might otherwise have been destroyed. In 1999 and 2000, says Manley, another three grizzlies might have been removed from the population if not for Wind River's presence. Equally important, he says, are the hundreds of contacts Partners in

Life personnel make each summer with landowners and recreationists, informing them of the importance of removing bear attractants.

"Bears have to learn to live compatibly with people and people need to learn to change their behavior as necessary so that bears aren't attracted to doing the wrong thing," says Graham. "Carrie's program is just elegant in the way it approaches both things simultaneously." Hegstad agrees and adds that Partners in Life is a natural fit for the foundation. "It's a revolutionary attempt at trying to change the fundamental relationship between bears and people," says Hegstad. "It's a perfect example of what we hope to accomplish with the foundation."

A second project the foundation has pledged to support, in partnership with the Mikal Kellner Foundation for Animals, FWP, and the U.S. Forest Service, is construction of a new wildlife rehabilitation and education center in Helena to replace FWP's existing wild animal shelter. It's a partnership that almost didn't come about. "We thought our plate was full," says Hegstad, referring to the foundation's commitment to the Partners in Life program. "But after seeing the condition of the existing shelter, we knew we had to get involved."

A burned black bear cub rescued from a Bitterroot Valley wildfire in the summer of 2000 became an impetus for that involvement. The cub's recovery at FWP's outdated shelter, constructed in 1965 as a short-term holding facility for orphaned and injured wildlife, focused the board's attention on the need for a new facility. "When the existing shelter was built," says Vince Yannone, a retired biologist who pioneered FWP's bear rehabilitation program, "the concept of holding animals was different than it is today. The shelter lacks heat and proper sanitation, and the cages are too small." Yannone notes that the shelter, although never intended to handle visitors, has become a popular attraction in Helena. As many as 600 school children have come calling in a single day, says Yannone.

Kelly Kuntz, chairman of the Mikal Kellner Foundation, recalls that it was Yannone who triggered their interest in helping build a new facility more than a decade ago. A major hurdle was cleared in 1993 when the Montana Legislature gave FWP authority to spend private dollars donated to construct the new facility. In 1995 the legislature authorized additional private and federal expenditures as part of a private-public partnership between the Kellner Foundation, FWP, and the U.S. Forest Service to raise funds to build the new facility.

Although the Fish, Wildlife & Parks Foundation's involvement in the project has just begun, board members have high hopes they'll be able to financially assist their partners and see the project through to completion. "Rehabilitating wildlife is part of a social evolution in this country," says board member Margaret Moddison.

These two key projects aside, another important role of the foundation is to act on the department's behalf to secure and distribute funds for existing and future collaborative projects. One such project is the Burlington Northern Environmental Stewardship Area (BNESA). A cooperative effort between state and federal agencies, the Burlington Northern and Santa Fe Railway Company, and several nonprofit groups, the BNESA exists to reduce wildlife losses and protect habitat along a 50-mile corridor paralleling Glacier National Park's southern boundary from East Glacier to West Glacier.

In just its first year in existence, the dare-to-dream-big philosophy of the Fish, Wildlife & Parks Foundation has already paid off: Last December, the Wendy P. McCaw Foundation contributed $250,000 to fund the operating budget of the Wind River Bear Institute for one year. "For the past five years every morning I've awakened wondering how I was going to find the funds to make it through another month," says Carrie Hunt. "This grant will go a long way toward helping us achieve and share our vision across North America through the example we set in Montana." In honor of the grant, Hunt christened this year's litter of Karelian bear dogs the "McCaw Litter."

Hegstad is equally ecstatic about landing the grant and what it will mean for the Partners in Life program. "This contribution is the first major step for funding the Partners in Life program on an annual basis. The McCaw grant will allow us now to work toward building a $10 million endowment to sustain the Partners in Life program in perpetuity," he says. "It's going to allow Carrie the total freedom to do what she does best, and that's teaching bears and people to coexist." Board member Lee Poole echoes that sentiment and is confident the McCaw grant is the first of many to come for the foundation. "If you are going to put the effort out there, swing for the fences," he says of his go-big philosophy. "If you're going to be a bear, be a grizzly." ■

MONTANA FISH, WILDLIFE & PARKS FOUNDATION

The Montana Fish, Wildlife & Parks Foundation raises funds to provide critical private support for FWP in its stewardship of the fish, wildlife, parks and recreational resources of Montana. The foundation accepts individual and corporate gifts and assists in designing planned gifts to fit individual needs.
For more information visit the foundation web site at
http://fwp.state.mt.us/foundation
or e-mail at *fwpfoundation@state.mt.us.*
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It's Not Rocket Science—It's Harder

by Bruce Auchly

When Bill Hill started as a fisheries biologist 32 years ago with Montana Fish, Wildlife & Parks, electroshocking fish to count them was a crude effort, some game wardens drove cars rather than trucks, and Hill steered dinky boats with small outboards across some big, scary water.

"We've gone from plumb, damn unsafe to being safe," Hill says. Translation: The boats are bigger now.

This year FWP celebrates its 100th anniversary and most folks are focusing on big battles won, such as restoration of elk and antelope populations, birth of the state park system, and managing Montana's streams for wild trout. Fine. People like victory parades and happy endings. Strike up the band.

But how's the view from the field? How has the work of the fish and wildlife biologist changed, say, during the last 30 years? Medical science has given us organ transplants and Prozac. Rockets now land on asteroids. Even chemistry has probably advanced in some manner that causes professors to laugh out loud. Whither the fisheries and wildlife sciences?

"We've moved away from focusing on individual species to looking at communities," says Bob White, leader of the Montana Cooperative Fishery Research Unit at Montana State University (MSU). In the past, White says, a fisheries education emphasized basic demographics: counting and aging fish and making population estimates. That has been supplemented with courses like stream ecology. Students are taught to look at a watershed and everything that happens, from a leaf falling and decomposing in the headwaters, through aquatic invertebrates, to geology and water chemistry to sunlight and effects on fish growth. "Now we're looking at the processes that are going on in a stream," White says. "You need to see the big picture."

A slight man with a deep voice, FWP's Hill was born and raised in Great Falls. He started summer work for what was then the Montana Fish and Game Department in 1961 while a college student at MSU. After receiving a master's degree, Hill worked for the North Dakota Game and Fish Department from 1965 until 1969, then returned to Montana and his current job in Choteau. Hill primarily oversees the Teton, Sun, and Marias river drainages plus several large reservoirs along the Rocky Mountain Front. His big picture runs from the Continental Divide east to the Missouri River at Loma, from the Sun River at Great Falls to the Canadian border.

Fish and wildlife biologists still count the critters in their districts. Always have, probably always will. What's changed, certainly during Hill's tenure, has been the equipment and technology.

"I started out with a two-wheel-drive Dodge panel wagon," he remembers. Four-wheel-drives, air-conditioning, even AM radios were just wishful thinking. Boats, too, were stripped-down conveyances, often to the point of skimping on safety.

Hill's first boat was a 16-footer with about 12 inches of freeboard that he steered with a tiller. That was pretty scary when the wind and waves combined on Tiber Reservoir. Now he uses console steering to pilot an 18-foot boat with 20 inches of freeboard. The engines have climbed from 9.5 horsepower to 70 horsepower. "I never sank a boat," Hill says, "but twice I came close to swamping."

Nets to gather fish haven't changed, but other technology has. Like electrofishing equipment. Nowadays fisheries crews use generators that send out different electric currents at different strengths. The stunned fish are netted and weighed, then released. The generators can sit in a boat or fit onto a backpack for stream work.

"Thirty years ago," Hill says, "you had no idea what you were doing to the fish." For stream work, the generators

FWP PHOTO

Thirty years ago, FWP fisheries biologists used small outboards to accomplish most tasks. Today the boats are bigger and safer.

BRUCE AUCHLY

FWP fisheries biologist Bill Hill (facing camera) has seen numerous technological advances in his 32 years with the agency.

were large and sat on the bank with lines going into the water. To test the strength of the electrical field, someone had to stick their hand in the water until they felt a tingle.

As rudimentary as that technique sounds, even in academia the effects of electroshocking on fish were long ignored. "We never, ever looked at that before," says MSU's White. That has changed in the past decade, although electrofishing done properly still remains the most efficient and economical method of sampling small-stream fish.

The biggest technological advance for the field biologist has been the computer. "I never used one until 1992," Hill says. Before this degenerates into a "boy, I miss the good old days" yarn, Hill will be the first to admit that computers make compiling data far, far easier. That's important because all good scientists, like Hill, are meticulous with data.

"Everything was done in longhand with early calculators and adding machines," he says. "Now it's really simple to put data in year after year after year. And you can get average fish weight, average length, and condition factors just by punching a button."

New technology has not been restricted to scientists, either. Anglers have sonar and depth finders and fish locators and graphite rods with invisible monofilament line. Next time someone complains about the fishing regulations being too complicated, or complains about how the regs were simpler when he was growing up, ask that person if he uses the same equipment as 40 years ago.

Not only are people better equipped, there are more of them. "A lot more people are out fishing now," he says. "I can remember going out in the spring [to do netting surveys] and never seeing a soul. Now they beat us out there, and we go at ice-out."

Across the isle in wildlife, the changes are comparable, especially when it comes to dealing with the public. "We do a lot less wildlife work than people work," says Gary Olson, an FWP wildlife biologist based in Conrad for 23 years. "People today are just intelligent, well-read about wildlife. The appetite for wildlife-related things is never ending."

Like Hill, Olson is a local boy who grew up to work for FWP just a few miles from his hometown. Similarly, Olson says the changes in his job have been incremental and beneficial, such as computer software packages that allow for better compilation of data.

The dangers of fisheries and wildlife work, however, are different. Wildlife biologists don't have to worry about going down with the ship, but they do spend a lot of time in the air with all the inherent perils. "Two years ago in the mountains we sat down with an emergency landing," Olson says. "Another time a prop of the helicopter I was in hit a power pole support cable, but we were able to land without serious damage." Most biologists know a colleague or have heard of someone in the business who didn't walk away from a plane crash. It's sobering.

The part of the job that doesn't

KRISTI DUBOIS

FWP wildlife biologist Gary Olson examines upland bird nesting cover near Conrad.

change, just seems to shrink every year, is the animal work. Just like his predecessors, Olson still counts deer and elk. "You still have to get out there and follow those animals around. We're doing the same things we did 30 or 40 years ago."

Well, not exactly. There was a time, Olson admits, when biologists went out in the winter and shot deer to see what was in their stomachs, to determine what the animals had been eating. That wouldn't happen today. "Now we analyze pellets to find out what they've been eating," he says.

In fact, today a biologist doesn't even have to see an animal to study it. "Scientists can determine the genetic makeup of a bear population through DNA analysis of hair samples," Olson says. "For example, you can tell if it's a closed population with a small gene pool, or whether animals are coming in from outside to breed."

So fisheries and wildlife management have advanced, though they may never rank up there with rocket science or brain surgery. Right? "Wildlife science is harder than rocket science," says Dan Pletscher, director of the wildlife biology program at the University of Montana in Missoula. "Rocket science is physics. Physics is predictable. You drop objects in a vacuum and they fall at a predictable rate. The farther you get away from physics, the harder things get. You have predators, competition, people, politics, weather.

"Wildlife science also is more difficult than medical science. The doctor gives you medicine and asks if it makes you feel better. If it does then you answer, yes. Wildlife doesn't answer."

Pass the Prozac, please. ■

FWP PHOTO

A research biologist poses with state-of-the-art radiotelemetry equipment in 1966.

Catchall

Three New FWP Commissioners Appointed

Governor Judy Martz appointed three new members to the Montana Fish, Wildlife & Parks Commission in February: Rich Lane of Missoula, John Lane of Cascade (no relation to Rich Lane), and Dan Walker of Billings. Rich Lane replaces Stan Meyer of Great Falls as commission chairman. Lane, 46, is regional manager of Smurfit-Stone Container Corporation in Missoula. He earned a B.S. degree in forest science from Pennsylvania State University in 1976 and M.S. in industrial forestry operations from Virginia Tech in 1981.

Rich Lane

John Lane

John Lane, 38, received a B.S. degree in agricultural business from Montana State University in 1986. He has ranched in the Cascade area since 1989 and is a member of the Devil's Kitchen Management Team, a local wildlife management group.

Dan Walker, 56, is retired from U.S. West, where he was employed for 26 years, most recently as director of public affairs for Montana. He graduated from Montana State University in 1967 with a B.S. degree in accounting. He operates a farm in Wheatland County.

The three new members will serve four-year terms. Remaining on the commission for two more years are Darlyne Dascher of Fort Peck and Tim Mulligan of Whitehall. In addition to Stan Meyer, other commission members whose terms expired in January include Charles Decker of Libby and David Simpson of Hardin.

Dan Walker

Bonus Points Available for Hunters

Beginning this year, resident and nonresident hunters who fail to draw one of Montana's coveted special big game licenses can start to collect bonus points that will give them a leg up for the next season's special moose, bighorn sheep, and mountain goat drawings.

According to FWP's Dave Mott, Montana's new bonus point system will be used to improve the odds of drawing hunting licenses or permits that are in high demand. In Montana, for example, the odds of drawing some bighorn sheep permits are less than 1 in 100. The new system won't guarantee a permit, but it will increase an applicant's chances.

The fee to participate in the voluntary bonus point system is $2 for Montana residents and $20 for nonresidents, payable with the big game drawing application fees.

Here's how the bonus system works:

- Applicants accumulate one bonus point for each unsuccessful year. Each bonus point essentially becomes an extra chance in future drawings. For example, applicants would have one chance to be drawn the first year they apply. If unsuccessful, they would have two chances to be drawn the following year and three chances the next year, and so on until they receive the license. Once successful, the applicant loses all bonus points for that species.
- An applicant may not apply for just a bonus point. Applicants must apply for a license and pay the necessary fee to obtain a bonus point.
- An applicant loses all bonus points if he or she fails to apply for a permit or license for more than two consecutive years for a particular species. There is an exemption for Montana residents with full-time active military status.
- Bonus points are accumulated independently for each species and only for "first-choice" districts. An applicant may skip two consecutive years of participation without forfeiting accumulated points, but if an applicant skips the third year—or has errors that eliminate the application from the drawing—all accumulated points will be lost.
- Rejection of an application because of applicant error is equivalent to failure to apply.
- Points are nontransferable.
- FWP will contact bonus-point participants each year to report their accumulated points. It will be the applicant's responsibility to report any discrepancies.

River Conference Set for Great Falls

The fifth annual Missouri River Natural Resources Conference will be held in Great Falls June 24-27, 2001. An opening reception at the Charles M. Russell Museum on the evening of the 24th will feature Jack Gladstone, a

MIKE GURNETT

Jack Gladstone

Blackfeet Indian singer, songwriter, and storyteller. A keynote address on the 25th by Dan Kemmis of Missoula will kick off a number of sessions on topics ranging from water allocation and water quality to floodplain management and Missouri River fish, wildlife, and history.

Highlights of the conference will include a "Lunch with Sacagawea" on Tuesday followed by a Native American Cultural Fair at Ulm Pishkun State Park with dancers, crafts, storytelling, games, and a bison burger barbecue. The conference will conclude on the 27th with a luncheon featuring Montana Museum of the Rockies curator Jack Horner, whose discoveries have revolutionized the study of dinosaurs.

The Missouri River Natural Resources Conference serves as a forum for citizens, resource managers, researchers, and policy makers to share points of view. Previous conferences have been held in Missouri, Nebraska, south Dakota, and North Dakota.

For additional information contact Chris Hunter, Fisheries Division, Montana Fish, Wildlife & Parks, P.O. Box 200701, Helena MT 59620-0701; 406-444-2449 or e-mail chunter@state.mt.us.

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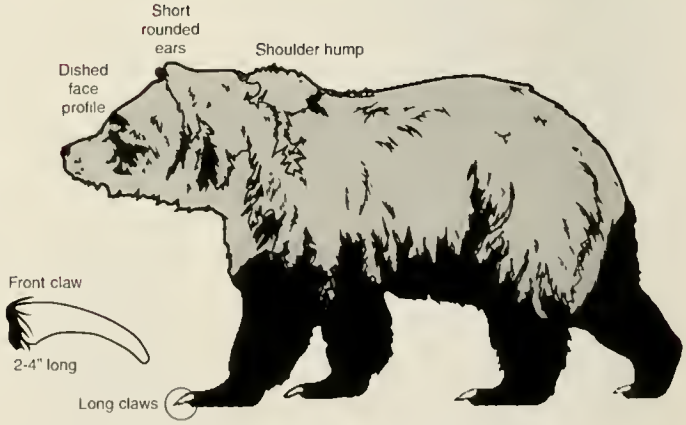

GRIZZLY BEAR

Color and size can be misleading

Learn how to identify bears. Visit FWP's new bear identification website at

fwp.state.mt.us/bearid

Montana State Parks Calendar

MAY

26-27—Paddlefest at Wayfarers on Flathead Lake
Come and try different types of kayaks at Flathead Lake State Park, Wayfarers Unit, in Bigfork. Call 406-751-4574.

26—Guided tours and Saturday lecture series begin at Bannack State Park
Talks feature historical, recreational, and natural resource topics. Call 406-834-3413.

JUNE

9—Buzzard Day at Makoshika State Park
Fun runs, "turkey shoot," nature walks, and many activities for the family. Call 406-365-6256.

12—Discovery Days at Spring Meadow Lake State Park
Tuesday night talks on natural history topics for kids and adults. Call 406-449-8864 ext. 154.

Native American dancers at Chief Plenty Coups State Park

16—Evening Campfire Talks at Salmon Lake State Park
Saturday night talks include historical and natural resource topics. Call 406-542-5531.

23—Evening Campfire Talks at Black Sandy State Park
Saturday night talks feature natural history and wildlife. Call 406-449-8864 ext. 154.

23—Canoe and Kayak Demo Days at Harpers Lake
Try different canoes and kayaks at Harpers Lake Fishing Access Site near Clearwater Junction. Call 406-542-5531.

24—Dale Tash Montana History Day at Bannack State Park
Learn the history of Bannack. Call 406-834-3413.

26—Native American Cultural Fair at Ulm Pishkun State Park
Native American games, art, and interpretation. Call 406-866-2217.

JULY

8—Triathlon at Spring Meadow Lake State Park
Swimming, running, and biking. Call 406-8864 ext. 154.

11—Bozeman Trail Wagon Train at Chief Plenty Coups State Park
A unique parade of wagons wind their way through the park. Call 406-252-1289.

14—Tour of the Night Skies at Council Grove State Park
Learn about constellations, black holes, and the whole universe at night. Call 406-542-5531.

14—"Cardboard Cup" Regatta at Spring Meadow Lake State Park
Build and race a cardboard boat to help raise funds for the new Wildlife Rehabilitation Facility and Nature Center. Call 406-449-8864 ext. 154.

20-22—Native American Art at Ulm Pishkun State Park
Artists display and sell their arts and crafts. Call 406-866-2217.

21-22—Bannack Days at Bannack State Park
History comes alive in this celebration of the Montana frontier. Activities include pioneer skill demonstrations, old-time music and food, old-fashioned melodramas and skits, wagon rides, gold panning, dancing, mountain men, and more. Call 406-834-3413.

21-22—Big Sky Thunderbirds at Frenchtown Pond State Park
Come watch the Big Sky Thunderbirds fly their beautiful radio-controlled model planes. Call 406-542-5531.

22—Montana State Games Triathlon at Lake Elmo State Park
Swimming, biking, and running. Call 406-247-2955.

28—Fort Owen Day at Fort Owen State Park
Explore a self-guided museum tour and enjoy history and folklore presented by artists and historians. Call 406-542-5531.

28—Crow Lifeways at Chief Plenty Coups State Park
Native crafts, stories, songs, dances, and music. Call 406-252-1289.

Seven New Fish Records for 2000

Fishermen have been known to stretch the truth, but Richard Babbitt wasn't kidding when he said there were larger smallmouth bass in the Flathead River than the 6.34-pound record-setter he caught in 1999. "I broke off a bigger one on 12-pound test," he told me last year. Sure enough, there was another lunker in the Flathead—a 6.40-pounder to be exact—that one, taken on a plastic worm by **Ken Riska** of Missoula, established a new state record in April of 2000. Almost unbelievably, **Mike Otten** of Lewistown landed a smallmouth weighing exactly the same amount in Fort Peck Reservoir last September. Otten, who took his fish on a Berkley Power-Pulse Worm, is no stranger to the fish records list. He also set a smallmouth bass record in 1996 with a 6.10-pound fish from Fort Peck Reservoir.

Top: Ken Riska with his record smallmouth bass. Above: Danny Spence displays the new record walleye.

Despite its long-term hold on the smallmouth bass record, Fort Peck Reservoir is perhaps better known for its big walleyes. Yet, the reservoir has claimed the state walleye record only twice—in 1995 and again in 2000. The 1995 walleye was bested the next year by a fish from Cooney Reservoir, where the record remained until January 21, 2000, when **Danny Spence** hauled a 16.63-pounder through the ice at Fort Peck. Spence, who lives in Bozeman, caught his 31.5-inch walleye on a minnow in the Crooked Creek portion of the reservoir. "I had an eight-inch auger," said Spence, and getting the fish through the hole was a pretty tight fit."

While some state fish records are broken on a fairly regular basis—smallmouth bass and sauger come to mind—others hold up for several years or even decades. Most of Montana's trout records, for example, go back 30 years or more: the bull trout record dates to 1916, the brook trout to 1940, the brown trout to 1966, and the cutthroat to 1955. One exception is the golden trout, for which new records were set in 1987, 1988, 1989 and 1993, all from Lightning Lake. In 2000 **Mike Malixi** of East Helena broke Lightning Lake's run of records when he hoisted a 5.43-pound golden trout from Cave Lake, eclipsing the 1993 record by more than half a pound. Cave Lake is in the Crazy Mountains north of Big Timber.

For the second year in a row, Hauser Lake yielded a record kokanee salmon. At 11:00 p.m. on June 28, 2000, **Rick Neiss** of Helena reeled in a 6.07-pound specimen, just big enough to edge the previous record of 6.03 pounds. "It was a surprise," Neiss said. "I didn't know what we had until we had it in the boat. I just couldn't believe it was that big and it was a salmon. It was a great night of fishing."

Residents of eastern Montana accounted for the remaining fish records set in 2000. **Bill Odenbach** of Glendive caught a 6.42-pound river carpsucker while fishing at Intake on the Yellowstone River. Incredibly, Odenbach's fish nearly doubled the previous record of 3.50 pounds. **Dave Fuller** of Fort Peck, fishing with a jig, caught a 1.56-pound cisco through the ice on Flat Lake in February, besting a fish taken by fellow Fort Peck resident Jim Liebelt in 1990. Finally, **Don Nevrivy** of Malta celebrated the Fourth of July in style at Nelson Reservoir by catching a 3.18-pound record goldeye.

Should you be lucky enough to catch a potentially record-setting fish this year, keep the following points in mind: FWP requires that you have the fish weighed before witnesses on a government-inspected scale, such as those found in most grocery stores. You will need to fill out a record fish report, available from any FWP office, and an FWP employee must positively identify the fish, either through direct examination or with help of a good color photo. Direct examination is preferable, because in some cases a photo will not suffice to verify the species.—*Dave Books*

Montana's Record-Setting Fish (2000)

Species	Weight	Angler	Year	Location
Arctic grayling	3.21 lbs.	Frederick C. Dahl	1994	Handkerchief Lake
Bigmouth buffalo	57.75 lbs.	Craig D. Grassel	1994	Nelson Reservoir
Black bullhead	2.33 lbs.	Darwin Zempel, Jr.	1994	Lower Flathead River
Black crappie	3.13 lbs.	Al Elser	1973	Tongue River Reservoir
Blue sucker	11.46 lbs.	Doug Askin	1989	Yellowstone River (near Miles City)
Bluegill	2.64 lbs.	Brent Fladmo	1983	Peterson's Stock Dam
Brook trout	9.06 lbs.	John R. Cook	1940	Lower Two Medicine Lake
Brown trout	29.00 lbs.	E.H. "Peck" Bacon	1966	Wade Lake
Bull trout	25.63 lbs.	James Hyer	1916	unknown
Burbot (ling)	17.08 lbs.	Jeff E. Iwen	1989	Missouri River (near Wolf Point)
Carp	40.20 lbs.	Jared Albus	1998	Nelson Reservoir
Channel catfish	27.17 lbs.	Ed Ellertson	1998	Castle Rock Reservoir
Chinook (king salmon)	31.13 lbs.	Carl L. Niles	1991	Fort Peck Reservoir
Cisco*	**1.56 lbs.**	**Dave Fuller**	**2000**	**Flat Lake**
Coho salmon	4.88 lbs.	Irven Stohl	1973	Fort Peck Reservoir
Cutthroat trout	16.00 lbs.	William D. Sands	1955	Red Eagle Lake
Flathead chub	0.53 lbs.	Lyle McKeever	1998	Marias River
Freshwater drum	20.44 lbs.	Richard C. Lee	1987	Fort Peck Reservoir
Golden trout*	**5.43 lbs.**	**Mike Malixi**	**2000**	**Cave Lake**
Goldeye*	**3.18 lbs.**	**Don Nevrivy**	**2000**	**Nelson Reservoir**
Green sunfish	0.56 lbs.	Roger Fliger	1991	Castle Rock Reservoir
Kokanee (salmon)*	**6.07 lbs.**	**Rick Neiss**	**2000**	**Hauser Reservoir**
Lake trout	42.00 lbs.	Dave Larson	1979	Flathead Lake (east shore)
Lake whitefish	10.08 lbs.	Theo Hamby	1995	Lower St. Mary Lake
Largemouth bass	8.29 lbs.	Adam Nelson	1999	Many Lakes
Largescale sucker	5.06 lbs.	Loren Kujawa	1996	Kootenai River
Longnose sucker	3.27 lbs.	Ray Quigley	1988	Marias River
Mottled sculpin	0.03 lbs.	Blaine X. Grisak	1997	Sheep Creek (Meagher Co.)
Mountain whitefish	5.09 lbs.	Mervin "Frog" Fenimore	1987	Kootenai River
Northern pike	37.50 lbs.	Lance Moyler	1972	Tongue River Reservoir
Northern squawfish	7.88 lbs.	Darrel Torgrimson	1991	Noxon Rapids Reservoir
Paddlefish	142.50 lbs.	Larry Branstetter	1973	Missouri River
Peamouth	0.74 lbs.	Angela Price	1999	Noxon Rapids Reservoir
Pumpkinseed	0.95 lbs.	Tim Colver	1985	Milnor Lake
Pygmy whitefish	0.18 lbs.	Frank Gamma	1999	Ashley Lake
Rainbow trout	33.10 lbs.	Jack Housel, Jr.	1997	Kootenai River (David Thompson Bridge)
Rainbow-cutthroat hybrid	30.25 lbs.	Pat Kelly	1982	Ashley Lake
River carpsucker*	**6.42 lbs.**	**Bill Odenbach**	**2000**	**Yellowstone River near Intake**
Rock bass	0.57 lbs.	Don Holzheimer	1989	Tongue River Reservoir
Sauger	8.81 lbs.	Gene Moore	1994	Fort Peck Reservoir
Shorthead redhorse sucker	4.68 lbs.	Ray Quigley	1985	Marias River near Loma
Shortnose gar	3.06 lbs.	John Johnson	1977	Fort Peck dredge cuts
Shovelnose sturgeon	13.72 lbs.	Sidney L. Storm	1986	Missouri River
Smallmouth bass*	**6.40 lbs.**	**Ken Riska**	**2000**	**Flathead River**
Smallmouth bass* (tie)	**6.40 lbs.**	**Mike Otten**	**2000**	**Fort Peck Reservoir**
Smallmouth buffalo	32.63 lbs.	Richard Liesener	1994	Nelson Reservoir
Stonecat	0.54 lbs.	Dale Bjerga	1996	Milk River
Tiger muskellunge	27.00 lbs.	Dan Dupea	1994	Lebo Lake
Tiger trout	4.04 lbs.	Joe Sobczak	1997	Bear Lake
Utah chub	1.81 lbs.	Eugene Bastian	1992	Canyon Ferry Reservoir
Walleye*	**16.63 lbs.**	**Danny Spence**	**2000**	**Fort Peck Reservoir**
White bass	2.25 lbs.	Vernon Pacovsky	1998	Missouri River
White crappie	3.68 lbs.	Gene Bassett	1996	Tongue River Reservoir
White sturgeon	96.00 lbs.	Herb Stout	1968	Kootenai River
White sucker	5.33 lbs.	Fred Perry	1983	Nelson Reservoir
Yellow bullhead	0.93 lbs.	Carl Radonski	1998	Tongue River Reservoir
Yellow perch	2.37 lbs.	Vernon Schmid	1988	Ashley Lake

***New Montana record for 2000**

From the Field

The Backcountry

by Jim DeBoer
Game Warden
Region 3 (Sheridan)

Poacher Trail, the Meat Rack, Frenchy's Meadows, Hummingbird Basin. All names of places that bring to mind the lure and legend of the Absaroka-Beartooth Wilderness. Adjacent to the northern boundary of Yellowstone National Park, this area plays host to Montana's early elk hunt opening every September 15. As a Montana Fish, Wildlife & Parks game warden in southwestern Montana, I've had the privilege of working the early hunt on several occasions. It's an experience that has never failed to recharge my mental batteries for months to come and give me a renewed and optimistic slant on life and my career.

The ten-day or two-week horse trip starts with lining up gear and groceries for a stay in one of the U.S. Forest Service cabins in Slough Creek or my favorite, Buffalo Fork. I was very thankful for the efforts the Forest Service folks made in saving that historical cabin when a fire hit the area in 1988. Planning for the trip, you know you'll forget something— you just hope it won't be too important, like the toilet paper supply that one year.

Leaving before sunrise and arriving about dark always sets the tone for the entire stay. Leave early, get in late. One of the great things about working the backcountry, other than not having a telephone, is the pace of living. It's steady, busy, and at the speed of a century ago. You can only travel so fast on horseback; to accomplish more, you simply have to start earlier or stay longer.

Big country, great companions, lasting memories. Like the time we confiscated an illegally killed bighorn ram. My partner Ron Carlson, a wiser and much older warden, decided to put his rainsuit on the ram's skinned and headless carcass to keep blood from his saddle during the trip back to camp. Good plan except it looked for all the world like we were transporting a dead human to anyone we passed on the trail. Another time we developed a residency case on a father-son team. The son was in the military and previously stationed in Montana. He claimed his father as dependent for military purposes and they maintained that qualified the father for resident hunting privileges, even though he had never lived in Montana. Kind of a reverse dependency sort of thing. We didn't buy it and neither did the judge.

Another celebrated FWP warden, Mark G. Anderson, related an interesting event at the Buffalo Fork cabin. They rode in late in the day through golf-ball size snowflakes. As they neared the cabin the horses told them something was amiss and then they saw a large hole torn in the side of the tack shed. The 55-gallon barrels that had held horse pellets were dragged outside and nearly flattened. A grizzly bear had helped himself to a final feast before going into hibernation. Do you have any idea the power is takes to mash a 55-gallon drum?

The cabins, by the way, are armored a little against bear abuse. The windows and doors have a heavy screen-like affair woven from barbed wire to keep the bears from attacking the doors and windows. The Buffalo Fork cabin was still under construction by two men in 1913 when three bears broke in. As the story goes, the men were sleeping in the loft and killed the bears just inside the door—about where I stand in front of the cook stove when I'm there.

The cabin is set on the edge of a large meadow next to the trail with the stream only a few steps farther on. I remember it measuring about 16 by 24 feet. Steep-roofed, it has one door and three windows and a loft over the back half. Out front there's a porch covered by the same steep roof, a wood box, and the obligatory antlers hung on the porch cross member. Just an old cabin to most, but as one long-time Forest Service employee commented, "It takes on a shrine-like significance to those who have spent some of the best days of their lives there." There's a tack shed for saddles, horse cake, tools, and an old insulated bag to keep a few perishables just a little longer in warm weather. A pole corral and a large horse pasture fenced with a storm fence are adjacent to the tack shed. Not too far, but not too close to the cabin, around back, is that cozy refuge in rainy weather or cold, the outhouse.

There is fresh snow this morning as I write this and I'm keeping the fire going in our wood range, a stove much like the one we use in the Forest Service cabins. Most times when I stoke the little cook stove at home I think of the backcountry, and the great meals shared with great folks at the end of a long but rewarding day. Then after supper come the stories and outright fabrications, each of us trying to outdo the other. A few of those stories and the fallout from them still live today—like the time we convinced fellow warden Bud Hubbard that we'd gotten a ticket for not having the brand inspection papers with us, or the time a pair of warden sergeants convinced us one of

FWP wardens Jim DeBoer (left) and Ron Carlson enjoy the view from the front porch of the Buffalo Fork Cabin in the Beartooth Wilderness.

FWP PHOTOS

The tack shed at Buffalo Fork provides shelter for saddles, horse cake, tools, and other equipment. "One of the great things about working the backcountry," says DeBoer, "is the pace of living.... You can only travel so fast on horseback."

them had been given disciplinary time off for personal behavior, we, in fact, would normally envy.

Sometimes there are too few hours of sleep until the alarm goes off well before daylight the next day and we're off on another adventure. One fall there came a heavy wet snow all wrapped up in a layer of fog. Visibility was not good at first, but as the day brightened and we rode up out of the valley floor we came into bright sun and blue sky. For a while I followed a grizzly track down a ridge as he raided squirrel cone caches. He'd clean out one pile and move on to another, leaving the whitebark pine cones not unlike I'd leave an ear of sweet corn.

Now comes the end of the day. Supper done, dishes finished, and the cabin comfortably warm. We're all storied out, tomorrow's plan has been discussed, and the water bucket is full. Bedtime. The last guy up turns down the lantern and hops across the cool floor on bare feet to his sleeping bag. The Coleman lantern, a marvel in itself, hisses and dies slowly going from bright to dark. You hear the hiss and see the light fade as you drift off to sleep and in the background you hear a mouse scurry somewhere.

Readers Respond

Great Work, Montana Photographers!

Thanks for starting the year off with such beautiful photos. They're a great reminder of why I love Montana. Great work, photographers. You must get great satisfaction from being able to observe firsthand what most of us can only experience in your wonderful photos. Please continue the good work. Montana always on my mind, *Brenda Townsend, via e-mail*

I have just received my January/February 2001 issue and beg you to continue such wonderful photography in your "first of the year" issue. I saw one of these issues several years back while visiting in a hospital in Seattle and subscribed to your magazine as soon as I could get to my checkbook!

The photography is outstanding. The picture of the drake pintail on pages 18-19 could easily pass for a duck stamp painting. Both covers are great but the back cover gets my vote for photo of the issue. All the landscapes make me want to see each scene with my own eyes. Keep up the good work.—*Floyd O'Neal, Augusta, Georgia*

Don't even think about not publishing the Special Photo Issue. My main reason for subscribing is to enjoy that issue.—*Germaine Eagleton, Colorado Springs, Colorado*

I just received the January/February 2001 issue, and consider it the best ever. The rutting elk photo by Donald M. Jones on p. 23 is one of the best wildlife portraits that I have ever seen. The landscape by Chuck Haney on pp. 36-37 is also very striking.

I would like to see the technical data; camera, film type, exposure, etc. printed with the photos, so that the photography hobbyists among us can see how the pros do it.

Keep up the good work. I always look forward to the next issue.—*Ed Wilson, Olney, Illinois*

I hunted in Montana before I retired on the last day of 1996. Since retirement my wife and I have visited Montana each and every year. The pictures in the January/February issue are a warm remembrance of happy times. Please never cease issues like this. Thank you.—*Kenneth Ted Williams, via e-mail*

Readers Weigh in on Wild Canaries

Your September/October 2000 issue featured a photo of a "wild canary," and you commented that there is no such bird and they are yellow warblers. Editors of my copy of National Geographic's *Field Guide to the Birds of North America* lack your wisdom, and they index the wild canary as an American goldfinch. I believe the "wild canary," often traveling in small flocks, that many of us in northeastern Montana have grown up with is the American goldfinch, which National Geographic describes as "widely known as 'wild canary.'"—*Robert Hurly, Glasgow*

In your September/October 2000 issue Todd Carlson of Anaconda identified the "wild canary" as a yellow warbler. Perhaps and probably that is the bird in western Montana but here in Lewistown the "wild canary" we see is the American goldfinch. I have the opportunity to see this bird frequently at short range and it matches the picture and description exactly as in Roger Peterson's *Field Guide to Western Birds*. The yellow or North American warbler is marked differently and though there may be some of those here also I've never seen them.

The photography in the magazine is terrific!—*Helen J. Shipman, Lewistown*

JAN L. WASSINK

American goldfinch

GARY KRAMER

Yellow warbler

We welcome your comments as well as letters to the editor. Please write us at: readers Respond, Montana Outdoors, 930 West Custer Avenue, P.O. Box 200701, Helena, MT 59620-0701; fax 406-443-4619; e-mail montanaoutdoors@state.mt.us.

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Contributors

E. DONNALL THOMAS JR. When politics or business get you down, what's the best thing to do? Throw your fishing gear in the truck and drive to the creek, says Thomas, whose story, "The Impossible Lie" (see page 2), describes a therapeutic encounter with an uncatchable trout. A physician and writer from Lewistown, Thomas is the author of *To All Things a Season*, the book in which this story first appeared. It can be ordered by calling 406-538-7436, or by visiting his web site at www.bowsite.com/thomas.

JOHN FRALEY AND RICH JANSSEN Because the south half of Flathead Lake lies within the Flathead Indian Reservation, the lake's fisheries are managed jointly by the Confederated Salish and Kootenai Tribes and the State of Montana. Recently a citizen's group was appointed to develop a co-management plan for Flathead Lake and River (see page 7). "Some people thought the committee would never reach agreement," say Fraley and Janssen, plan coordinators during the process, "but they were wrong." Fraley is an information officer in FWP's Region 1 (Kalispell) office, and Janssen holds the same position for the tribes in Pablo.

ELLEN HOROWITZ Her birdwatching mentor referred to the nighthawk as "pork and beans." Others have called it a bullbat, goatsucker, mosquito hawk, and even a "flying toad," she says. To learn more about this fascinating bird, turn to her article beginning on page 13. Horowitz, who lives in Columbia Falls, is a professional hiking guide and writer who specializes in natural history subjects.

DAVE HAGENGRUBER He admits the term "urban fishery" doesn't fit very well with most perceptions of Montana. "But as angler education coordinator for FWP," he says, "I find myself hearing and using the term more and more often." The reason? "Even in Montana, we need places near town where kids can learn to fish and develop a lifelong interest" (see page 17).

KEITH HIGHLEY FWP has expanding responsibilities in many areas, but traditional funding sources haven't grown to meet these challenges. "A few years ago, FWP Director Pat Graham concluded a public nonprofit foundation could help fill in the gap," says Highley, "and the Montana Fish, Wildlife & Parks Foundation was born" (see page 21). Highley is a Salt Lake City-based free-lancer who has written extensively about bears and other large predators.

BRUCE AUCHLY Has the work of wildlife and fisheries biologists changed much in the last 30 years? Yes and no, says Auchly. Technological advances, especially computers, have made data analysis much faster. And better boats, vehicles, and aircraft have made some facets of the work safer and more efficient (see page 24). "But biologists still need to go out and count fish and animals, and wildlife behavior is not always predictable." Auchly is FWP's information officer in the Region 4 (Great Falls) office.

From top to bottom: Thomas, Fraley and Janssen, Horowitz, Hagengruber, Highley, Auchly

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